

significant advancement over the art. First, the number of pre-stored views is limited by the amount of available memory. In a hand-held device, more than a few predetermined views would be impractical. Further, a pre-stored view may not show the features of particular interest to the user, or show those features from the vantage point of the user. On the other hand, applicant's claimed invention can generate a nearly infinite number of views, each based on a then current location of the user, showing the golf course from the vantage point of the user.

The Examiner correctly notes on page 2 of the Office Action that Reeves teaches a device that displays alphanumeric information only, and therefore, fails to teach or suggest dynamically generating a graphical view depending on the user's current location. The Examiner, however, attempts to remedy this deficiency by combining Reeves with Fisher, and advances the theory that the combination of the references renders Applicant's claim 1 obvious. However, the Examiner has erred because Fisher does not teach or suggest dynamically generating a graphical view as required by claim 1, but instead discloses nothing more than displaying one of a set of pre-determined views stored in memory.

Fisher discloses a cart-mounted golf computer and replay device useful, for example, for tracking users' scores, wagers, and offering real-time recommendations for club selection. Further, the device of Fisher provides a graphical display so that a user may view the layout of each hole of a given golf course. However, any similarities between Applicant's dynamically generated graphical display, and the graphical display disclosed by Fisher, end here. A close study of Fisher, column 7, line 66, to column 8, line 1, reveals that the disclosed golf computer "displays either the green screen 142, approach screen 143 or hole screen 144" (emphasis added). Therefore, the device of Fisher, while graphical, displays only one of three possible screens for each hole

regardless of the user's actual position on the course. These views are not dynamically generated, but are pre-calculated and stored in memory. Thus, the user in Fisher is limited to the views that are stored into memory prior to beginning the round.

Retrieving one of a limited number of predetermined views from memory does not satisfy the claim 1 requirement of dynamically generating a graphical view based on the user's current location. A predetermined view is not dynamically generated based on a user's current location. Instead the views are generated in advance and stored in the user's device prior to the start of the golf round without regard to a user's location of the course. Further, predetermined views do not provide the added benefits of the claimed invention, namely, the ability to display a nearly infinite number of views, and the ability to display views from the vantage point of the user.

Thus, neither the alphanumeric display of Reeves, nor the pre-determined screens of Fisher, teach or suggest dynamically generating a graphical view as required by claim 1. Therefore, claim 1 defines patentable subject matter over the art cited by the Examiner. Accordingly, Applicant respectfully requests the allowance of claim 1, and its dependent claims 2-31, and 86-87.

Likewise, Applicant has amended independent claim 32 to now require "a processor to perform calculations using said user's current location and the location of at least one golf course feature to dynamically generate location dependent course information." As stated above, neither Reeves nor Fisher teach or suggest, alone or in combination, dynamically generating graphical displays. Thus, for the reasons stated with respect to claim 1, claim 32 defines patentable subject matter over the cited art. Respectfully, Applicant requests the allowance of claim 32, and its dependent claims 33-51, 81-85, and 88-92.

Claim 8 further requires the dynamically generated view to include “the direction in which the user intends the ball to travel due to the next stroke.” Thus, the user may view the intended direction of flight of the ball before taking the next stroke. Fisher, in contrast, merely discloses a separate “home-based” replay system that requires transferring a memory module containing golfer history, collected during play, from the golfing unit to the replay unit. While this may allow a user to play hypothetical golf games, as well as replay actual golf games, it is nothing more than a video game (see column 9 of Fisher, lines 5-14), and does not allow a user to view the intended direction of the ball prior to the shot. Instead, the replay system may only be used after the strokes are already registered and only “during idle time at home” (see Fisher, column 11, lines 5-14). Thus, neither Reeves nor Fisher teach or suggest, alone or in combination, the subject matter of claim 8. As such, Applicant respectfully requests the allowance of claim 8.

Claims 11 and 87 requires the dynamically generated view to include an indication of the user's current position on the course. As stated above, none of the references cited by the Examiner, either alone or in combination, teach or suggest the use of a graphical display to show a user's position anywhere on a course, including the green. Therefore, neither Reeves nor Fisher teach or suggest, alone or in combination, claims 11 and 87. As such, Applicant respectfully requests the allowance of claims 11 and 87.

Claims 28 and 90 requires the graphic display to indicate a probable landing zone or region on the course, within which the ball will probably rest following the user's next stroke. Thus, Applicant has the ability to predict and graphically show, prior to a given shot, a probable area on the course where the ball will land. As stated above with respect to claim 8, the alpha-numeric display of Reeves is inadequate to render any type

of graphical view, and Fisher displays a view of the entire fairway and does not show a probable landing zone within the view. That is, fisher provides no indication where on the fairway the ball will land. Thus, neither Reeves nor Fisher teach or suggest, alone or in combination, claims 28 and 90. As such, Applicant respectfully requests the allowance of claims 28 and 90.

Claim 92 recites that the graphical view shows the forces acting on the golf ball. The Examiner's assertions notwithstanding, this elements is not taught or suggested by Fisher. Accordingly, claim 92 is patentable over the art of record.

New claim 93 recites that the graphical view comprises a selected portion of the course between the user's current location and the target hole. This limitation further defines how the user's current location is used in the present invention to dynamically generate a graphical view. By showing a selected portion of the course between the user's current location and the target hole, the view is necessarily scaled and rotated to show the view from a vantage point appropriate for the user's current location. This tailoring of the view to the user's current location is not taught or suggested by the prior art of record.

Attached hereto is a marked-up version of the changes made to claims by the current amendment.

Respectfully submitted,
COATS & BENNETT, P.L.L.C.

By:


David E. Bennett
Registration No. 32,194
Telephone: (919) 854-1844

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS DOCUMENT IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL ON THE DATE INDICATED, POSTAGE PREPAID, IN AN ENVELOPE ADDRESSED TO: COMMISSIONER FOR PATENTS, BOX NON-FEE AMENDMENT, WASHINGTON, D.C. 20231.

SIGNATURE: David E. Bennett

DATE MAILED: 7-18-02

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

Claim 32 has been amended as follows:

32. (Thrice Amended) A cellular radiotelephone comprising:

- (a) a cellular radio transceiver to communicate with a cellular network;
- (b) a radiolocation receiver for receiving at least one external locating signal from which a user's current location on a golf course can be determined;
- (c) data storage operatively connected to said cellular radio transceiver for storing data relating to the location of at least one golf course feature, wherein said data relating to the location of said at least one golf course feature is received via said cellular network from said cellular radio transceiver;
- (d) a processor to perform calculations using said user's current location and the location of at least one golf course feature to dynamically generate location dependent course information; and
- (e) a display to display said location dependent course information.